REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 5 July 2007. Responsive to the Office Action, Claims 1, 13, 14, and 18 have been amended for further prosecution with the other pending Claims. Claim 22 has been cancelled. It is believed that with such amendments of Claims 1, 13, 14, and 18, there are further clarification of their recitation.

In the Office Action, the Examiner rejected Claims 13-18, 21, and 22 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Accordingly, the claims have been amended to provide the necessary clarification thereto. It is now believed that the Claims particularly point out and distinctly claim the subject matter that the Applicant regards as the invention.

In the Office Action, the Examiner rejected Claims 1, 2, 13, 14, and 22 under 35 U.S.C. §102(e) as being anticipated by Yamada, et al., U.S. Patent No. 6,714,814. The Examiner also rejected Claims 4, 15, 16, and 21 under 35 U.S.C. §103(a) as being unpatentable over Yamada, et al. Claims 5, 6, 17, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nielsen, et al., U.S. Patent Application Publication No. 2003/0120164, in view of Yamada, et al.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to the structure for a device for measuring electrocardiogram. The device for measuring

electrocardiogram includes a shell being shaped as a thin elongated cube having a top surface including a left side, a right side, a right upper finger touching area located on the right side of the top surface, and a left upper finger touching area located on the left side of the top surface and being parallel with the right upper finger touching area. The device includes a bottom surface being opposite to the top surface having a left side, a right side, a right lower finger touching area located on the right side of the bottom surface, and a left lower finger touching area located on the left side of the bottom surface being parallel with the right lower finger touching area. A front edge is vertically formed between the top and bottom surfaces. A right edge is vertically formed between the top and bottom surfaces. A left edge is vertically formed between the top and bottom surface. A rear edge is vertically formed between the top and bottom surfaces. The electrocardiogram measuring device further includes a right finger gelless electrode with a thin foil shape having a right upper gelless electrode embedded in a right upper finger touching area of the top surface and being distant from the right, left, and rear edges. A right lower gelless electrode formed on the lower right finger touching area of the lower surface and being distant from the right, left, and rear edges. A right middle gelless electrode is formed on the front edge and connected between the right upper and lower gelless electrodes, and being distant from the right and left edges. A left finger gelless electrode with a thin foil shape includes a left upper electrode embedded in the left upper finger touching area of the top surface and being distant from the right, left, and right edges. A left lower electrode is formed on the left lower finger touching area of the lower surface and being distant from the right, left, and rear edges. A left middle electrode is formed on the front

and connected between the left upper and lower electrodes and being distant from the right and left edges. The structure also includes at least one information display located on the top surface in order to display a plurality of measured values. A calculation system is mounted in the shell and connected to the two gelless electrodes and the information display for calculating relative electric information measured from the gelless electrodes and display results on the information display.

The operating panel (13) includes two buttons (21) for setting and transferring functions, gelless electrodes with a thin foil shape are provided as right and left electrodes (15, 17) and are slightly embedded and fixed in the operating panel (13). The operating panel passes over an edge of the shell (11) to extend along a bottom surface (23) of the shell (11), opposite to the operating panel (13). Electrodes (15, 17) are made of any conductive metal or conductive rubber. Each electrode has protruding surfaces on ridges (151, 171) to act as gripping surfaces for the root area between two fingers of each of a user's two hands to clampingly engage the respective electrodes.

It is respectfully submitted that the Yamada, et al. reference discloses in Fig. 23 the external appearance of a bioelectrical impedance measuring apparatus. The housing (161) is substantially box shaped. On the left side of the housing (161), a left thumb-insert aperture (162a) is formed that it substantially linearly penetrates the housing (161) from the left upper portion of the front face of the housing (161) to the left upper portion of the rear face of the housing (161). A cylindrical left-thumb electrode (163a) is provided to cover the whole wall of the left-thumb-insert aperture (162a). A left-palm electrode

(164a) is provided under the left-thumb-insert aperture (162a) to cover the left side portion of the housing (161). The left and right-thumb electrodes (163a, 163b) are shown in Fig. 23. Both hands, particularly the palms are put in contact with the left and right-palm electrodes (164a, 164b) respectively in using the measure apparatus (160). Thus, the total electrode area to be in contact with the hands is enlarged in using the measuring apparatus (160), making the contact resistance of the electrode area smaller.

The Yamada, et al. reference does provide for a bioelectrical impedance measuring apparatus that measures the body fat from user's arms, not fingers. However, Yamada, et al. is not directed to an electrocardiogram measuring device (measuring a person's heart beat) which is measured from the person's fingertips. Thus, the Yamada, et al. reference does not provide for: "... a right finger gelless electrode with a thin foil shape having a right upper gelless electrode embedded in the right upper finger touching area of the top surface and being distant from the right, left and rear edges... a right lower gelless electrode formed on the right lower finger touching area of the lower surface and being distant from the right, left and rear edges... a right middle gelless electrode formed on the front edge and connected between the right upper and lower gelless electrodes and being distant from the right and left edges...", nor does it provide for: "... a left finger gelless electrode with a thin foil shape having a left upper electrode embedded in the left upper finger touching area of the top surface and being distant from the right, left and rear edges... a left lower electrode formed on the left lower finger touching area of the lower surface and being distant from the right, left and rear edges... a left middle electrode formed on the front edge and connected between the left upper and lower electrodes and

being distant from the right and left edges ...", as is clearly seen in newly-amended independent Claim 1. Thus, the Yamada, et al. reference does not provide for the elements as now seen in newly-amended independent Claim 1 for the objects and purposes of the subject Patent Application.

The Nielsen, et al. does not overcome the deficiencies of the Yamada, et al. reference. The Nielsen, et al. reference is directed to a patient monitoring system (100). The system (100) includes one or more input devices (105), a patient monitor console (110), a data entry device (115) connected to the console (110), and one or more output devices (120) connected to the console (110). The input device (105) further includes one or more sensors which are connectable to the patient and acquire additional physiological signals from the patient. Thus, as previously discussed for the Yamada, et al. reference, the Nielsen, et al. reference fails to disclose or suggest a right finger gelless electrode with a thin foil shape having a right upper gelless electrode embedded in the right upper finger touching area of the top surface and being distant from the right, left and rear edges... a right lower gelless electrode formed on the right lower finger touching area of the lower surface and being distant from the right, left and rear edges... a right middle gelless electrode formed on the front edge and connected between the right upper and lower gelless electrodes being distant from the right and left edges... a left finger gelless electrode with a thin foil shape having a left upper electrode embedded in the left upper finger touching area of the top surface and being distant from the right, left and rear edges... a left lower electrode formed on the left lower finger touching area of the lower surface and being distant from the right, left and rear edges... a left middle electrode

formed on the front edge and connected between the left upper and lower electrodes and being distant from the right and left edges, as now claimed in newly-amended Claim 1.

As neither the Yamada, et al. reference nor the Nielsen, et al. reference disclose or suggest the concatenation of elements that form the instant invention, as now claimed, it is not believed that they make unpatentable that invention. In fact, both Yamada, et al. and Nielsen, et al. teach away from structure of the invention of the subject Patent Application ,as now defined in amended Claim 1.

Turning to another matter, regarding newly-amended independent Claim 13, both the Nielsen, et al. reference, and the Yamada, et al. reference fails to disclose or describe: "... a right upper finger touching area located on the right side of the top surface...", nor does it provide for: "... a left upper finger touching area located on the left side of the top surface and being parallel with the right upper finger touching area... a right finger gelless electrode with a thin foil shape embedded in the right upper finger touching area of the top surface and being distant from the front, right, left and rear edges... a left finger gelless electrode with a thin foil shape embedded in the left upper finger touching area of the top surface and being distant from the front, right, left and rear edges...", as is clearly seen in newly-amended independent Claim 13.

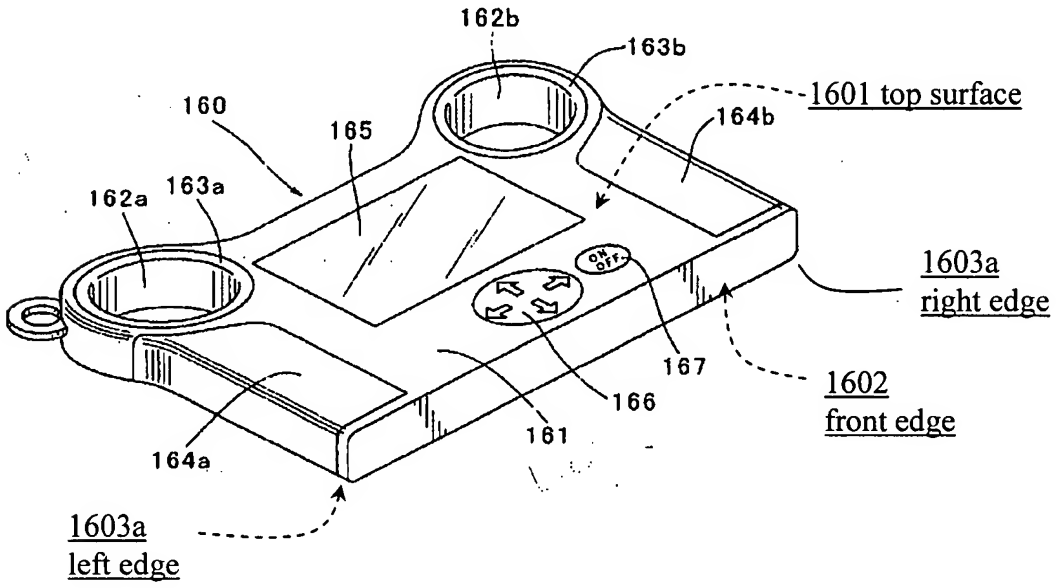
The Examiner asserted that "the operating panel having two opposing sides" is unclear and the term "two pairs of gelless electrodes" does not have an antecedent basis. With reference to the claim amendment, the two 112 rejections have been overcome.

The Examiner identified a newly-cited reference (US 6714814 B2; hereinafter referred to as the "Yamada patent") and asserted that Fig. 23 of the Yamada patent

discloses claims 1, 2, 13, 14 and 22. The applicant has to clarify that the Yamada patent provides a **bio-electrical impedance measuring apparatus** and not an **measuring electrocardiogram apparatus**. This is a huge difference between the Yamada patent and the present invention since each embodiment of the Yamada patent requires a pair of current electrodes and a pair of voltage electrodes to calculate the bio-electrical impedance of an user's body.

With reference to Fig. 23 of the Yamada patent and according to col. 21 line 51 to col. 22 line 31, an embodiment of the bio-electrical impedance measuring apparatus has

FIG. 23



a casing (161) having

a top surface (1610);

a right edge (1603b);

a left edge (1603a);

a right thumb-insert aperture (162b); and

a left thumb-insert aperture (162a);

a first pair of the current electrodes (163a/b) consisting of

a cylindrical right-thumb electrode (163b) formed on inner side of the right thumb-insert aperture (162b) and

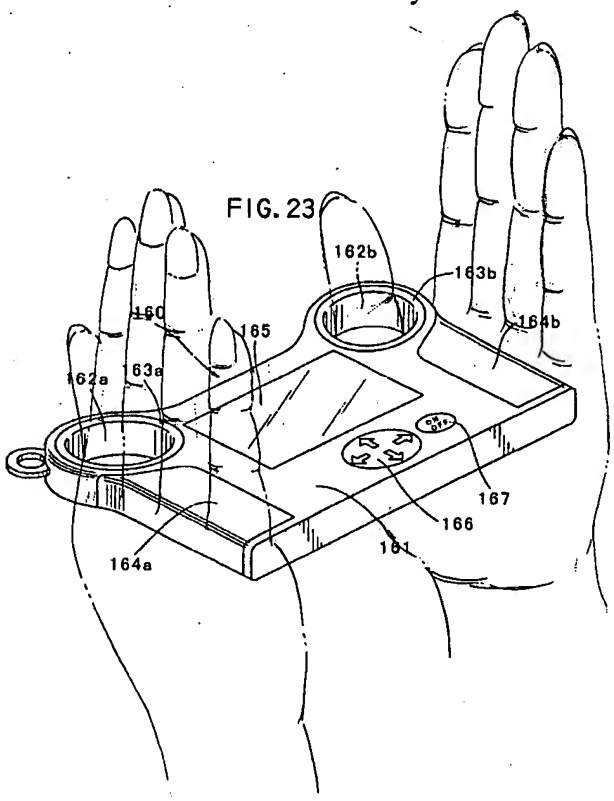
a cylindrical left-thumb electrode (163a) formed on inner side of the left thumb-insert aperture (162a);

a second pair of the voltage electrodes (164a/b) consisting of

a right-palm electrode (164b) formed on the right side portion of the housing (161), wherein the right-palm electrode (164b) is formed on the top surface (1610) and then extends to the right edge (1603b); and

a left-palm electrode (164a) formed on the left side portion of the housing (161), wherein the left-palm electrode (164a) is formed on the top surface (1610) and then extends to the left edge (1603a).

According to col. 22 lines 39 to 52, the applicant prepared an operational view of Fig. 23 of the Yamada patent as follows:



If a person would like to measure his or her bio-electrical impedance by the embodiment of the Yamada patent, the first pair of the current electrodes (163a/b) and the second pair of the voltage electrodes (164a/b) must touch on his or her body at the same time. According to col. 22 lines 39 to 51 of the Yamada patent, the person inserts his or her two thumbs respectively in the right and left thumb-insert aperture (162b, 162a) and then the two palms naturally and respectively touching the right-palm electrode (164b) on the right edge (1603b) and the left-palm electrode (164a) on the casing on the left edge (1603a). Further, to make the person correctly use the embodiment of Fig. 23, the cylindrical right-thumb electrode (164b) and the cylindrical left-thumb electrode (164a) are necessary elements according to col. 22 lines 53 to 57. The pair of the voltage electrodes (164a/b) extend respectively to the right and left edges (163a/b) of the

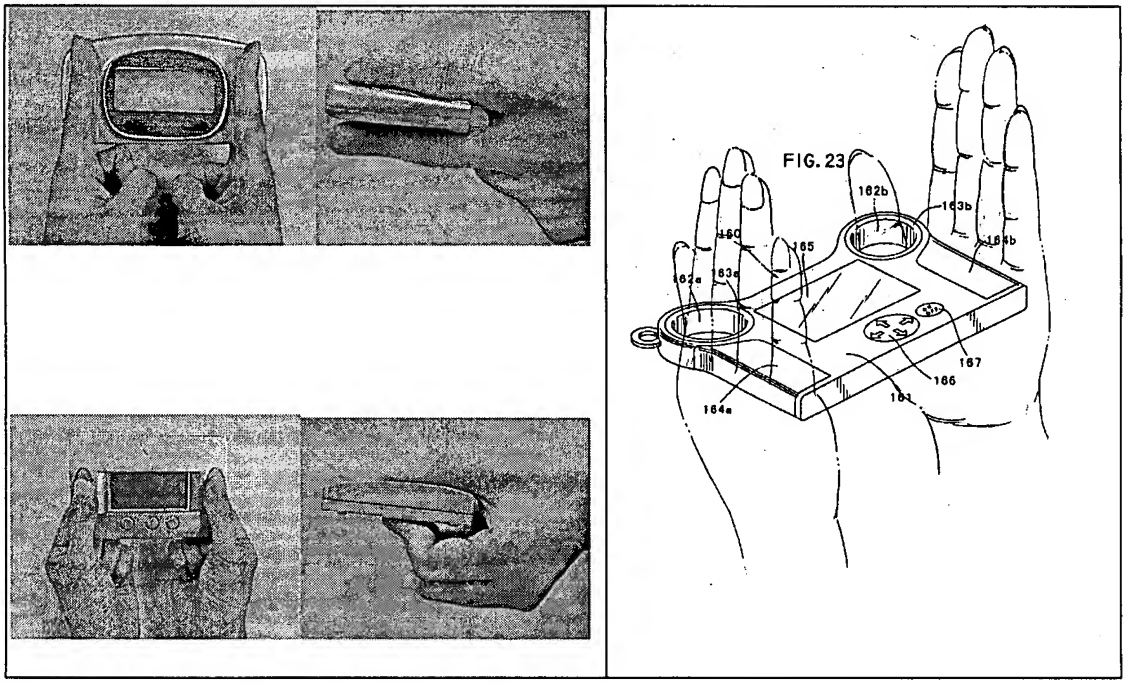
housing (160) and do not extend to the front edge (160). Therefore, the pair of the voltage electrodes (164a/b) extends respectively to the right and left edges (163a/b) are only used to respectively touch the user's right and left palms.

In addition, the pair of the voltage electrodes is formed on the right and left side portions of the housing and is only used to respectively touch the user's right and left palms, not fingers. Therefore, after reading the Yamada patent, people skilled in the art would not be motivated to use only two finger electrodes on the casing for measuring bio-electrical impedance. Although the Yamada patent discloses the pair of the voltage electrodes (164a/b), they are formed on the right and left edges (1603a/b) of the housing (160).

Referencing to other embodiments of the Yamada patent, each embodiment has a first pair of current electrodes and a second pair of voltage electrodes used to touch the person's forearm, hands, etc. Therefore, four electrodes are required by each embodiment of the Yamada patent.

With reference to the following drawing and amended claims 1 and 13, the present invention only has two finger electrodes and the design of electrodes is different from the Yamada patent. In claim 13, the two finger electrodes are only formed on the top surface of the shell for user's finger to touch. In claim 1, two finger electrodes are formed on the top and bottom surfaces and respectively further extended to the front edge and the bottom surface for user's four fingers to clip and contact with them to measure the electrocardiogram value. Therefore, according to amended claims 1 and 13, the finger

electrodes are created for user's fingers and the amended claims 1 and 13 differ from the Fig. 23 of the Yamada patent.



Therefore, amended claims 1, 2, 13 and 14 differ from the Yamada patent, so claims 1 to 7 and claim 13 to 18, 21 and 22 should be allowable.

Thus, Yamada, et al. fails to disclose each and every one of the elements of the subject Patent Application, cannot anticipate the invention as now claimed. Further, as the reference fails to suggest the combination of elements, it cannot make obvious the claimed invention.

Given such deficient teachings of the primarily-cited Yamada, et al. reference, the secondarily-cited Nielsen, et al. reference is found to be quite ineffectual to the present patentability analysis. The Examiner cited this reference for isolated features, however, each fails to remedy the deficiency of the primarily-cited Yamada, et al. reference.

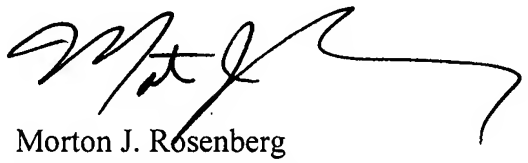
Therefore, even the combination of Yamada, et al. and Nielsen, et al. are not believed to make obvious the invention of the subject Patent Application as now defined by newly-amended independent Claims 1 and 13.

The remaining references cited by the Examiner, but not used in the rejection have been reviewed, but are believed to be further removed from the Applicant's invention as defined in the newly-amended Claims 1 and 13 when taken with respect to the references used in the rejection.

It is believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

If there are any charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectfully submitted,
For: ROSENBERG, KLEIN & LEE



Morton J. Rosenberg
Registration No.: 26,049
Dated: 11-2-07

Rosenberg, Klein & Lee
3458 Ellicott Center Dr.
Suite 101
Ellicott City, MD 21043
(410) 465-6678
Customer No.: 04586